Dissertations Initiative for the Advancement of Limnology and Oceanography: DIALOG V and VI

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LONG TERM GOALS

Founded in 1993, the Dissertations Initiative for the Advancement of Limnology and Oceanography (DIALOG) program seeks to (1) facilitate interdisciplinary, inter-institutional and international aquatic science research, understanding and collaborations; (2) reduce the historical, institutional and philosophical barriers that limit the exchange of information among aquatic scientists; and (3) expedite the transition from Ph.D. student to independent researcher.

OBJECTIVES

DIALOG is an educational and human resource program. It targets aquatic scientists and those in related disciplines that have recently obtained their Ph.D. degrees and wish to pursue interdisciplinary aquatic science research. DIALOG has four major components

- **Ph.D. Dissertation registry:** Recent Ph.D. recipients are invited to submit an abstract of their Ph.D. dissertation research for inclusion in the DIALOG Dissertation Registry.
- **Database:** Demographic information is collected with the dissertation abstracts in order to characterize recent graduates for human-resource purposes.
- Electronic Newsletter: Jobs and other items of interest to recent grads are posted weekly through an electronic newsletter. Symposium participants can keep in touch after the symposium through listservs dedicated to each symposium cohort.
- **Symposium:** A symposium is held every other year to enhance interdisciplinary understanding and promote collegial interactions across the aquatic sciences. The fifth DIALOG symposium will be held October 19-24, 2003, at the Bermuda Biological Station for Research.

As the program grows, new resources are added. A DIALOG reception for students and recent grads is currently held in conjunction with the annual ASLO meeting.

APPROACH

To reach a broad cross section of the aquatic science community, DIALOG engages professional societies to advertise the program. Sponsoring and co-sponsoring societies now include ASLO, AFS, AGU, ERF, ESA, NABS, NALMS, PSA, SCL, SIL, TOS and WSN. ASLO (American Society of Limnology and Oceanography) has agreed to house the DIALOG web page on their server (http://aslo.org/phd.html). Posters are sent to universities and departments with aquatic science programs, as well as to past participants. They are also distributed at professional society meetings. Announcements are also sent to various e-mail distribution lists. Using advertisements through the

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Form Approved OMB No. 0704-0188 sponsoring societies, mailings, handouts, distribution lists and the web site, the program is announced as widely as possible to reach all potential participants. All program and symposium application procedures are accomplished through the web site (www.aslo.org/dialog.html). The program is fully international. Participation has grown from 80 participants in DIALOG I to 447 in DIALOG V.

- 1. **Ph.D. Dissertation registry:** The registry provides a unique introduction to the work of this most recent generation of aquatic scientists. Each year increasing numbers of graduates take advantage of the opportunity to be part of this international collection, and more scientists, employers and administrators use this resource to identify recent graduates and get an overview of their work. Dissertation abstracts are submitted on line and immediately posted on the ASLO web site in a format that can be searched by year, name, and key words (http://aslo.org/phd.html). Everyone who registers a dissertation is placed on an electronic distribution list to receive the weekly DIALOG Newsletter.
- 2. **Database:** Information submitted by program applicants and the results of surveys completed by symposium participants are compiled in a database and used to characterize program participants and to assess trends.
- 3. **Symposium:** Symposium applicants submit a two page CV (with list of peer-reviewed publications), a half page essay answering the question "Why did you select your particular dissertation topic, and what is the importance/significance/potential impact of your findings?", a half page essay answering the question "Why do you want to attend the symposium/how will you and other participants benefit from your participation?" and, two letters of recommendation. For DIALOG V, an eight-member review committee reviewed 146 applications.

WORK COMPLETED

A total of 447 dissertation abstracts were received for the DIALOG V Program, with 146 individuals applying for the DIALOG V Symposium. This represents a significant increase compared to the DIALOG IV Program in which 221 abstracts were registered with 124 individuals applying to the symposium.

The importance of the dissertation registration service is indicated by the increasing number of individuals who take time to register their dissertation even when they are not interested in applying to the symposium. This also reflects graduate interest in being part of the on-line Dissertation Registry and receiving the weekly electronic DIALOG Newsletter. See http://aslo.org/phd.html for details.

RESULTS

The 447 DIALOG V Program participants were citizens of the following countries: Argentina (4), Australia (12), Austria (2), Bangladish (2), Barbados (1), Belgium (5), Brazil (10), Canada (31), Chile (2), China (5), Columbia (4), Costa Rica (2), Denmark (8), Egypt (1), Finland (2), France (12), Germany (35), Ghana (1), Guatemala (1), Iceland (1), India (9), Indonesia (2), Ireland (3), Israeli (4), Italy (4), Japan (7), Kenya (1), Korea (6), Malaysia (2), Mexico (7), Nepal (1), Netherlands (4), New Zealand (1), Nigeria (1), Norway (2), Portugal (3), Russia (1), Slovenia (1), South Africa (2), Spain (13), Sudan (1), Sweden (10), Switzerland (7), Thailand (1), Turkey (3), United Kingdom (17), Uruguay (2), Venezuela (1), Zimbabwe (1) and the United States (188). One did not specify citizenship.

Table 1. Comparison of DIALOG I, II, III, IV and V Programs. In some cases the registrants did not provide all demographic information requested and so totals below do not always add up to the total for abstracts submitted.

DIALOG Program #	I	II	III	IV	V
	06/92-	10/94-	04/97-	04/99-	01/01-
PhDs completed	09/94	03/97	03/99	12/00	03/03
Abstracts Submitted	80	98	166	221	447
	27	31	24 months	21 months	(27
	months	months			months)
Applied to Symposium	67 of 80	87 of 98	92 of 166	124 of 221	146 of 447
American Citizens	42	37	78	81	188
Other Citizenship	38	61	88	140	259
PhD Institution - USA	53	43	92	105	229
PhD Institution - Other	27	55	74	116	218
Limnologists	28	58	62	81	136
Oceanographers	52	40	104	140	277
Hydrologists, global, terrestrial,					34
social, atmospheric					
Male	52	47	97	129	248
Female	28	51	69	86	198

Of the 447 participants for DIALOG V, 229 completed their Ph.D. at U.S. Institutions, compared with 105 for DIALOG IV. Gender composition was 198 (44%) Female and 249 (56%) Male (Table I).

IMPACT

The DIALOG symposium reaches participants at a pivotal point in their research careers. Based on their comments, the symposium changes the way participants think, communicate, and approach their research. The science community and the general population will benefit from the perspectives these new PI's bring back to their home institutions and share with their students and colleagues. This group should act as a catalyst to move the entire field in exciting new, interdisciplinary directions.

By facilitating the development of close collegial ties, symposium participants come away with a network of colleagues from around the globe with interests in aquatic science research and education.

Past participants are collaborating on research proposals, and all have noted that participation has enabled them to develop a more interdisciplinary view of their field, influencing the way they interpret, communicate, and approach their research.

TRANSITIONS

1. Participants in the DIALOG symposia have been involved in interdisciplinary (including some international) research collaborations; an international student exchange program at two institutions; the organization of several workshops and meeting sessions; and the ongoing communication throughout the entire group about research, education and science policy issues via an electronic distribution list.

- 2. The dissertation compilation (available on the web site and compiled into a printed publication after each symposium) has been and is continuing to be used by established scientists, managers and students to get an overview of the latest research and to identify these new entrants to the scientific community.
- 3. The demographic information is providing a profile of the newest entrants to the aquatic science community--their gender, age, ethnicity, citizenship, Ph.D.-granting institutions and subsequent employers, and disciplinary interests. This information will enable a variety of interest groups to better track the aquatic science community (which has been difficult to profile, due to the large number of degree-granting institutions, departments in which an aquatic scientist might reside, and variety of key words under which aquatic science falls in general science databases).

RELATED PROJECTS

Symposium participation is limited to 40 participants due to time limitations and the breakdown in group dynamics that occurs with larger groups. DIALOG has been on a biennial symposium schedule. Due to the popularity of the program and recent increase in numbers, Dr. Weiler proposed the symposium be held on an annual basis. There was some concern that there would not be sufficient applicants to justify the increased frequency, or the quality of applicants might drop. NOAA's Coastal Ocean Program funded a "pilot" symposium to test the concept of holding an annual symposium. The 2002 symposium was sponsored by Whitman College and the Estuarine Research Federation (ERF) and held October 28 – November 2, 2002 in Guanica, Puerto Rico. Seventy-two graduates applied for the symposium. The following year, 146 graduates applied for the DIALOG V symposium, up from 124 for DIALOG IV.

The application review committees for DIACES and DIALOG IV were impressed with high quality of applicants and agreed that there are sufficient grads to support an annual symposium cycle. NOAA COP and Sea Grant Programs are providing funds to cover the administrative costs for another DIALOG symposium in 2004. This moves the symposium schedule up, so DIALOG IV will take place in 2004 and DIALOG VII in 2005.

PUBLICATIONS

Weiler, C.S. 2003. DIALOG V Program Report. http://marcus.whitman.edu/~weilercs/DIALOG_V/

Burks, R.L., D.R. Corbett, D.M. Gibson, D.L. Hoskins, S.A. Ludsin, K.I. Stocks and C.S. Weiler, 2003. Successful Mentoring: Reflections of recent aquatic science PhDs. *Submitted to AAAS Next Wave*

Baker, A., J. Benoit, R. Burks, M. Castillo, R. Corbett, D. Hoskins, J. Klug, R. Shipe and S. Wilhelm. 2001. Academic Job Hunting Tips and Advice: Results of DIALOG IV Symposium Working Group Discussion. http://aslo.org/phd/jobhuntiing.pdf

Conde, D., A. Ferrara, S. Gerken, M. Julius, J. Martin, C. Natunewicz, D. Nemerson, E. Parnell, J. Warren and D. Zawada. 2002. DIACES 2002 Job Search Strategies and Tips. http://aslo.org/phd/jobhunting2002.html

- Karentz, D. 2001. Tips for Proposal Writers. Prepared for DIALOG IV Workshop. http://aslo.org/phd/proposal.pdf
- Meysman, F.J.R, Harry Potter and the Ecologist's Thesaurus. Submitted, Frontiers in Ecology and the Environment.
- Talley, D.M., E.W. North, A.R. Juhl, D.A. Timothy, D. Conde, J.F.C. deBrouwer, C.A. Brown, L.M. Campbell, T. Garstecki, C.J. Hall, F.J.R. Meysman, D.M. Nemerson, P.W. Souza Filho and R.J. Wood. 2003. Research challenges at the land/sea interface. Report from the 2004 DIALOG/DIACES symposium. Accepted, Estuarine, Coastal and Shelf Science.
- Weiler, C. S. 2003. Talking Tips: Resources for preparing scientific presentations recommended by DIALOG and DISCCRS program participants. http://marcus.whitman.edu/~weilercs/TalkingTips/

Book(s) or other one-time publications(s):

- Weiler, C.S., 2001 DIALOG III: Dissertations Initiative for the Advancement of Limnology and Oceanography. Ph.D. Dissertation Abstracts and Program Summary. 166 pp. Book Published
- Weiler, C.S., 2003 DIALOG IV: Dissertations Initiative for the Advancement of Limnology and Oceanography. Ph.D. Dissertation Abstracts and Program Summary. 222 pp. Book Published
- Weiler, C.S. 2003. DIALOG V: Dissertation Initiative for the Advancement of Limnology and Oceanography. Program Report with Ph.D. Dissertation Citations. 55 pp. Book Published
- Weiler, C.S. 2003. DIALOG V: Dissertation Initiative for the Advancement of Limnology and Oceanography. Program Report with dissertation abstracts from American citizens, U.S. degree recipients and U.S. residents. 290 pp. Book Published
- Weiler, C.S. 2003. DIALOG V: Dissertation Initiative for the Advancement of Limnology and Oceanography. Program Report including abstracts from degrees completed outside the U.S. 262 pp. Book Published
- Weiler, C.S. 2003. DIALOG V: Dissertation Initiative for the Advancement of Limnology and Oceanography. Program Report including abstracts from degrees completed outside the U.S. Whitman College.

Webpages developed and updated by C.S. Weiler:

Programs for recent PhDs: http://aslo.org/phd.html